DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 05/29/09 have been fully considered but they are not persuasive.

Regarding rejection under 35 U.S.C. paragraph 101 on page 21, and rejection under 35 U.S.C. paragraph 112 on page 22, the applicant has agreed to cancel claims 31, 32, 44, 50 and 56 during the interview with Mr. Drew Leyes on 09/21/09.

The applicant argues with respect to claim 1, on page 36, first paragraph that Cudak et al. does not use length of a data queue as an indication of a future need for resources and is completely silent as to these claimed features. The examiner disagrees. Cudak et al. clearly teach at col. 2, lines 36-38 in the passage "The Countdown Value (length of a data queue as an indication means) provides the network with the ability to accurately estimate and exactly calculate the total block count for the transmission (a future need for resources means),". Cudak et al. further teach at col. 2, lines 43-45 in the passage "the network shall monitor subsequent Countdown Values in order to determine the number of blocks (length of a data queue as an indication means) remaining in the transmission."

The applicant argues that the combination of Cudak et al. and Tiedemann et al. is improper, and that it would not be obvious to one of ordinary skill in the art to modify Cudak et al. with the features of Tiedemann et al. since the combination will not work. The examiner disagrees. The motivation to combine Tiedemann et al.'s teaching of queue size in Cudake et al. would be to transmit an indication of the amount of data by

remote station 6. Independent claims 8, 14, 15, 20-22, 31-33, 38, 39, 44-46, 50-52, 56 and 57 are also rejected because these claims recite similar features as independent claim 1.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Drew Leyes on 9/21/09.

Claims 31, 32, 44, 50 and 56 have been canceled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3, 4, 7-9, 13-16 and 18-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cudak et al. (US 6,359,898) in view of Tiedemann, Jr. et al. (US 5,914,950).

For claims 1, 3, 4, and 7, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

monitoring a length of a data queue in a first network element as an indication of future need of communication resources in a first network element (col. 2, lines 36-45), wherein the indication comprises a coded value of the length of the data queue in the first network element (figure 1, reference step 112, col. 2, lines 24-29), and wherein the length of the data queue is embedded in a data block from the first network element (figure 1, reference 114, col. 2, lines 32-35); and

allocating the communications resources based on the indication (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose a transmission between the first network element and a second network element based on the indication. In an analogous art, Tiedemann, Jr. et al. disclose a transmission between the first network element and a second network element based on the indication (col. 21, lines 51-53).

Tiedemann, Jr. et al. disclose wherein the indication comprises information about a transmit buffer of the first network element (col. 21, lines 51-53 as set forth in claim 3);

wherein the indication comprises information on the additional resources needed for said first network element (col. 22, lines 50-51 as set forth in claim 4); and wherein the first network element is a mobile station and the second network element is a base station of a wireless communication network (col. 6, lines 19-22 as set forth in claim 7).

One skilled in the art would have recognized the transmission between the first network element and a second network element based on the indication, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claims 8-9, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

a plurality of first stations (col. 1, lines 16-17);

a second station connected to said plurality of first stations through a plurality of communication links (col. 1, lines 16-20);

control allocation of the communication resources among the communications links, wherein the control allocation being separate and independent from the first stations, said allocation is performed in accordance with information transmitted from the first stations and wherein the information from each of the first stations comprises a data block embedding

a coded value of a lengths of a data queues (figure 1, reference step 112, col. 2, lines 24-29) in each of the first stations (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose a controller. In an analogous art, Tiedemann, Jr. et al. disclose a controller (col. 6, line 21).

Tiedemann, Jr. et al. disclose wherein said controller is part of said base station (col. 6, lines 18-21 as set forth in claim 9).

One skilled in the art would have recognized the controller, and would have applied Tiedemann, Jr. et al.'s base station controller 10 in Cudak et al.'s base station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being to coordinate the communication between remote stations 6 in the CDMA network (col. 6, lines 21-22).

For claim 13, Cudak et al. disclose wherein each of said first station transmits a transmission comprising a plurality of data blocks, and wherein the coded value of the length of a data queues of one of the first stations is provided in each of said data blocks in the transmission associated with said one first station (figure 1, reference step 112, col. 2, lines 24-29).

For claims 14, 18, 26, and 28, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

control allocation of communication resources for at least one mobile station (col. 2, lines 36-38), wherein the allocation is based upon queue length information (figure 1,

reference step 112, col. 2, lines 24-29) received from the mobile station that is embedded in a data block (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose a controller. In an analogous art, Tiedemann, Jr. et al. disclose a controller (col. 6, line 21).

Tiedemann, Jr. et al. disclose wherein the processor receives a plurality of data packets and each of said data packets comprises said queue length information (col. 6, lines 21-24 as set forth in claim 18); a decoder configured to: decode (col. 7, lines13-15) the queue length information for each of the at least one mobile station, and provide said queue length information for each of the at least one mobile station to the controller (col. 6, line 21)(col. 21, lines 51-53 as set forth in claim 26); and wherein the code comprises information on the additional resources needed by each of the at least one mobile (col. 21, lines 51-53 as set forth in claim 28).

One skilled in the art would have recognized the controller, and would have applied Tiedemann, Jr. et al.'s base station controller 10 in Cudak et al.'s base station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being to coordinate the communication between remote stations 6 in the CDMA network (col. 6, lines 21-22).

For claims 15, 19, and 30, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

a code representative of the length of a data queue (figure 1, reference step 112, col. 2, lines 24-29); embedded in a data block (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose a processor; and transmit said data packets and said data block with said code included in the data block as a field. In an analogous art, Tiedemann, Jr. et al. disclose a processor (col. 6, line 42), and transmit said data packets and said data block with said code included in the data block as a field (col. 21, lines 51-53).

Tiedemann, Jr. et al. disclose wherein the transmitter is further configured to transmit the indication in each data packet that is transmitted from the transmitter (col. 21, lines 51-53 as set forth in claim 19); and wherein the code comprises information on the additional resources needed by each of the at least one mobile station (col. 22, lines 50-51 as set forth in claim 30).

One skilled in the art would have recognized the processor, and would have applied Tiedemann, Jr. et al.'s controller 68 in Cudak et al.'s mobile station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being to process the request by routing the request command to encoder 72 (col. 6, lines 42-44).

For claim 16, Cudak et al. disclose and wherein the monitoring comprises receiving data packets and wherein each of the data packets comprises the indication of

the length of the data queue is sent in every packet (figure 1, reference step 112, col. 2, lines 24-29).

For claim 20, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

a code representative of a length of a data queue (figure 1, reference step 112, col. 2, lines 24-29) in a mobile station wherein the length of the data queue is embedded in a data block from the mobile station (figure 1, reference 114, col. 2, lines 32-35); and

controlling allocation of communication resources is configured to provide queue length information for the mobile station to the controller means (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose decoder means and controller means. In an analogous art, Tiedemann, Jr. et al. disclose decoder means (col. 7, lines13-15) and controller means (col. 6, line 21).

One skilled in the art would have recognized the decoder means and controller means, and would have applied Tiedemann, Jr. et al.'s channel element 40 in Cudak et al.'s base station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being to demodulate and decode the baseband signal, the inverse of the signal processing functions done at remote station 6 (col. 7, lines 13-15).

For claim 21, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

data generator means for generating data (col. 2, lines 1-3);

data queue means for receiving data packets from the data generator means (col. 2, lines 24-25);

encoder means for encoding a code representative of a length of the data queue means (figure 1, reference step 112, col. 2, lines 24-29) wherein the encoder means is configured to embed the length of the data queue in data block (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose transmitter means for transmitting said data and said block, wherein said code is included in the data block as a field. In an analogous art, Tiedemann, Jr. et al. disclose transmitter means for transmitting said data and said block, wherein said code is included in the data block as a field (col. 21, lines 51-53).

One skilled in the art would have recognized the transmitter means for transmitting said data and said block, wherein said code is included in the data block as a field, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claims 22 and 24, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

generating data (col. 2, lines 1-3);

encoding a code representative of a length of a data queue in a first network element (figure 1, reference step 112, col. 2, lines 24-29), wherein the length of the data queue is embedded in a data block and the data queue is configured to receive the data block (figure 1, reference 114, col. 2, lines 32-35); and

data packets comprising a field comprising said code, wherein said code is used when allocating communication resources for a transmission between the first network element and a second network element (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose transmitting data packets between the first network element and a second network element. In an analogous art, Tiedemann, Jr. et al. disclose transmitting data packets between the first network element and a second network element (col. 21, lines 51-53).

Tiedemann, Jr. et al. disclose wherein the code comprises information on the additional resources needed by said first network element (col. 22, lines 50-51 as set forth in claim 24).

One skilled in the art would have recognized the disclose transmitting data packets between the first network element and a second network element, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link

rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claim 23, Cudak et al. disclose wherein the encoding of the code further comprises information about a transmit buffer of the first network element (figure 1, reference step 112, col. 2, lines 24-29).

For claim 25, Cudak et al. disclose wherein the first network element comprises a mobile station and the second network element is a base station of a wireless communication network (col. 1, lines 16-20).

For claim 27, Cudak et al. disclose wherein the code comprises information about a transmit buffer for each of the at least one mobile station (figure 1, reference step 112, col. 2, lines 24-29).

For claim 29, Cudak et al. disclose wherein the code further comprises information about a transmit buffer for the apparatus (figure 1, reference step 112, col. 2, lines 24-29).

For claim 31, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

monitoring a length of a data queue in a first network element as an indication of future need of communication resources in a first network element (col. 2, lines 36-45), wherein the indication comprises a coded value of the length of the data queue in the first network element (figure 1, reference step 112, col. 2, lines 24-29), and wherein the

length of the data queue is embedded in a data block from the first network element (figure 1, reference 114, col. 2, lines 32-35); and

allocating the communications resources based on the indication (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose a transmission between the first network element and a second network element based on the indication. In an analogous art, Tiedemann, Jr. et al. disclose a transmission between the first network element and a second network element based on the indication (col. 21, lines 51-53).

One skilled in the art would have recognized the transmission between the first network element and a second network element based on the indication, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claim 32, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

generating data (col. 2, lines 1-3);

encoding a code representative of a length of a data queue in a first network element (figure 1, reference step 112, col. 2, lines 24-29), wherein the length of the data

queue is embedded in a data block and the data queue is configured to receive the data block (figure 1, reference 114, col. 2, lines 32-35); and

data packets comprising a field comprising said code, wherein said code is used when allocating communication resources for a transmission between the first network element and a second network element (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose transmitting data packets between the first network element and a second network element. In an analogous art, Tiedemann, Jr. et al. disclose transmitting data packets between the first network element and a second network element (col. 21, lines 51-53).

One skilled in the art would have recognized the disclose transmitting data packets between the first network element and a second network element, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claims 33 and 35, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

monitoring a length of a data queue in a first network element as an indication of future need of communication resources in a first network element (col. 2, lines 36-45), wherein the indication comprises a coded value of the length of the data queue in the

first network element (figure 1, reference step 112, col. 2, lines 24-29), and wherein the length of the data queue is embedded in a data block from the first network element (figure 1, reference 114, col. 2, lines 32-35); and

allocating the communications resources based on the indication (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose a transmission between the first network element and a second network element based on the indication, and a processor. In an analogous art, Tiedemann, Jr. et al. disclose a transmission between the first network element and a second network element based on the indication (col. 21, lines 51-53), and a processor (col. 6, line 42).

Tiedemann, Jr. et al. disclose wherein the processor is further configured to monitor information on additional resources needed by said first network element (col. 22, lines 50-51 as set forth in claim 35).

One skilled in the art would have recognized the transmission between the first network element and a second network element based on the indication, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claim 34, Cudak et al. disclose wherein the processor is further configured to monitor information about a transmit buffer of the first network element (figure 1, reference step 112, col. 2, lines 24-29).

For claim 36, Cudak et al. disclose wherein the first network element comprises a mobile station and the second network element comprises a base station of a wireless communication network (col. 1, lines 16-20).

For claim 37, Cudak et al. disclose wherein the processor is further configured to perform the monitoring by receiving data packets and wherein each of the data packets comprises the indication of the length of the data queue (figure 1, reference step 112, col. 2, lines 24-29).

For claim 38, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

monitoring means for monitoring a length of a data queue in a first network element as an indication of future need of communication resources in a first network element (col. 2, lines 36-45), wherein the indication comprises a coded value of the length of the data queue in the first network element (figure 1, reference step 112, col. 2, lines 24-29), and wherein the length of the data queue is embedded in a data block from the first network element (figure 1, reference 114, col. 2, lines 32-35); and

allocating means for allocating the communications resources based on the indication (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose a transmission between the first network element and a second network element based on the indication. In an

analogous art, Tiedemann, Jr. et al. disclose a transmission between the first network element and a second network element based on the indication (col. 21, lines 51-53).

One skilled in the art would have recognized the transmission between the first network element and a second network element based on the indication, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claims 39-43, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

controlling allocation of communication resources for a mobile station (col. 2, lines 36-38), wherein the allocation is based upon queue length information (figure 1, reference step 112, col. 2, lines 24-29) received from the mobile station that is embedded in a data block (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose a controller. In an analogous art, Tiedemann, Jr. et al. disclose a controller (col. 6, line 21).

Tiedemann, Jr. et al. disclose decoding (col. 7, lines13-15), by the controller, a code representative of the queue length information for each of the at least one mobile station, and provide said queue length information for each of the at least one mobile

station to the controller (col. 21, lines 51-53 as set forth in claim 40); receiving a plurality of data packets, wherein each of said data packets comprises said queue length information (col. 6, lines 21-24 as set forth in claim 41); wherein the decoding of the code comprises decoding information about a transmit buffer for each of the at least one mobile station (col. 21, lines 51-53 as set forth in claim 42); and wherein the decoding of the code further comprises decoding information on the additional resources needed by each of the at least one mobile station (col. 22, lines 50-51 as set forth in claim 43).

One skilled in the art would have recognized the controller, and would have applied Tiedemann, Jr. et al.'s base station controller 10 in Cudak et al.'s base station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being to coordinate the communication between remote stations 6 in the CDMA network (col. 6, lines 21-22).

For claim 44, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

controlling allocation of communication resources for a mobile station (col. 2, lines 36-38), wherein the allocation is based upon queue length information (figure 1, reference step 112, col. 2, lines 24-29) received from the mobile station that is embedded in a data block (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose a controller. In an analogous art, Tiedemann, Jr. et al. disclose a controller (col. 6, line 21).

One skilled in the art would have recognized the controller, and would have applied Tiedemann, Jr. et al.'s base station controller 10 in Cudak et al.'s base station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being to coordinate the communication between remote stations 6 in the CDMA network (col. 6, lines 21-22).

For claim 45, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

controlling means for controlling allocation of communication resources for a mobile station (col. 2, lines 36-38); and

allocation means for performing the allocation based upon queue length information (figure 1, reference step 112, col. 2, lines 24-29) received from the mobile station that is embedded in a data block (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose a controller. In an analogous art, Tiedemann, Jr. et al. disclose a controller (col. 6, line 21).

One skilled in the art would have recognized the controller, and would have applied Tiedemann, Jr. et al.'s base station controller 10 in Cudak et al.'s base station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-

originated transfer for a packet radio system with the motivation being to coordinate the communication between remote stations 6 in the CDMA network (col. 6, lines 21-22).

For claims 46, 47 and 49, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

encoding a code representative of the length of a data queue (figure 1, reference step 112, col. 2, lines 24-29) embedded in a data block (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose transmitting said data packets and said data block with said code included in the data block as a field. In an analogous art, Tiedemann, Jr. et al. disclose transmitting said data packets and said data block with said code included in the data block as a field (col. 21, lines 51-53).

Tiedemann, Jr. et al. disclose wherein said transmitting of said data packs comprises transmitting a plurality of data packets, and wherein each of said data packets comprises said code (col. 21, lines 51-53 as set forth in claim 47); and wherein the encoding of the code further comprises encoding information on additional resources needed by said first network element (col. 22, lines 50-51 as set forth in claim 49).

One skilled in the art would have recognized the transmitting said data packets and said data block with said code included in the data block as a field, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in

Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claim 48, Cudak et al. disclose wherein the encoding of the code further comprises encoding information about a transmit buffer for the first network element (col. 2, lines 32-35).

For claim 50, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

encoding a code representative of the length of a data queue (figure 1, reference step 112, col. 2, lines 24-29) embedded in a data block (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose transmitting said data packets and said data block with said code included in the data block as a field. In an analogous art, Tiedemann, Jr. et al. disclose transmitting said data packets and said data block with said code included in the data block as a field (col. 21, lines 51-53).

One skilled in the art would have recognized the transmitting said data packets and said data block with said code included in the data block as a field, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer

for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claim 51, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

encoding means for encoding a code representative of the length of a data queue (figure 1, reference step 112, col. 2, lines 24-29) embedded in a data block (figure 1, reference 114, col. 2, lines 32-35).

However, Cudak et al. do not expressly disclose transmitting means for transmitting said data packets and said data block with said code included in the data block as a field. In an analogous art, Tiedemann, Jr. et al. disclose transmitting means for transmitting said data packets and said data block with said code included in the data block as a field (col. 21, lines 51-53).

One skilled in the art would have recognized the transmitting means for transmitting said data packets and said data block with said code included in the data block as a field, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claims 52 and 54, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

a processor configured to

generate data (col. 2, lines 1-3);

encode a code representative of a length of a data queue in the apparatus (figure 1, reference step 112, col. 2, lines 24-29), wherein the length of the data queue is embedded in a data block and the data queue is configured to receive the generated data block (figure 1, reference 114, col. 2, lines 32-35); and

data packets comprising a field comprising said code, wherein said code is used when allocating communication resources between the apparatus and another network element (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose a transmission between the apparatus and another network element. In an analogous art, Tiedemann, Jr. et al. disclose a transmission between the apparatus and another network element (col. 21, lines 51-53).

Tiedemann, Jr. et al. disclose wherein the code comprises information on the additional resources needed by the apparatus (col. 22, lines 50-51 as set forth in claim 54).

One skilled in the art would have recognized the transmission between the apparatus and another network element, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann,

Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claim 53, Cudak et al. disclose wherein the code further comprises information about a transmit buffer of the apparatus (figure 1, reference step 112, col. 2, lines 24-29).

For claim 55, Cudak et al. disclose wherein the apparatus comprises a mobile station and the another network element comprises a base station of a wireless communication network (col. 1, lines 16-20).

For claim 56, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

generating data (col. 2, lines 1-3);

encoding a code representative of a length of a data queue in a first network element (figure 1, reference step 112, col. 2, lines 24-29), wherein the length of the data queue is embedded in a data block and the data queue is configured to receive the data block (figure 1, reference 114, col. 2, lines 32-35); and

data packets comprising a field comprising said code, wherein said code is used when allocating communication resources between the first network element and a second network element (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose a transmission between the apparatus and another network element. In an analogous art, Tiedemann, Jr. et al.

disclose a transmission between the apparatus and another network element (col. 21, lines 51-53).

One skilled in the art would have recognized the transmission between the apparatus and another network element, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claim 57, Cudak et al. disclose method for performing a countdown function during a mobile-originated transfer for a packet radio system, comprising:

data generating means for generating data (col. 2, lines 1-3);

encoding means for encoding a code representative of a length of a data queue in a first network element (figure 1, reference step 112, col. 2, lines 24-29), wherein the length of the data queue is embedded in a data block and the data queue is configured to receive the data block (figure 1, reference 114, col. 2, lines 32-35); and

data packets comprising a field comprising said code, wherein said code is used when allocating communication resources between the first network element and a second network element (col. 2, lines 36-38).

However, Cudak et al. do not expressly disclose a transmission between the apparatus and another network element. In an analogous art, Tiedemann, Jr. et al.

disclose a transmission between the apparatus and another network element (col. 21, lines 51-53).

One skilled in the art would have recognized the transmission between the apparatus and another network element, and would have applied Tiedemann, Jr. et al.'s data queue size in Cudak et al.'s countdown value CV. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Tiedemann, Jr. et al.'s method and apparatus for reverse link rate scheduling in Cudak et al.'s method for performing a countdown function during a mobile-originated transfer for a packet radio system with the motivation being assigning the maximum scheduled transmission rate (col. 21, lines 49-51).

For claim 58, Cudak et al. disclose wherein the monitoring further comprises monitoring a countdown value of the data block for an indication of the length of the data queue (col. 2, lines 24-25).

For claim 59, Cudak et al. disclose wherein the controller is configured to perform the allocation based on queue length information included in a countdown value of the data block (col. 2, lines 36-38).

For claim 60, Cudak et al. disclose wherein the processor is configured to include the code representative of the queue length in a countdown value of the data block (col. 2, lines 24-25).

For claim 61, Cudak et al. disclose wherein the encoding further comprises encoding the code representative of the length of the data queue in a countdown value of the data block (col. 2, lines 32-35).

For claim 62, Cudak et al. disclose wherein the processor is configured to monitor a countdown value of the data block for an indication of the length of the data queue (col. 2, lines 24-25).

For claim 63, Cudak et al. disclose wherein the controlling further comprises performing the allocation based on queue length information included in a countdown value of the data block (col. 2, lines 36-38).

For claim 64, Cudak et al. disclose wherein the encoding further comprises including the code representative of the queue length in a countdown value of the data block (col. 2, lines 32-35).

For claim 65, Cudak et al. disclose wherein the processor is configured to encode the code representative of the length of the data queue in a countdown value of the data block (col. 2, lines 32-35).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TOAN D. NGUYEN whose telephone number is (571)272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D. N./
Examiner, Art Unit 2416

/William Trost/

Supervisory Patent Examiner, Art Unit 2416